North Carolina Department of Environment and Natural Resources
Division of Water Quality

Beverly Eaves Perdue, Governor | Coleen H. Sullins, Director | Dee Freeman, Secretary

December 15, 2011
Craven County
DWQ Project No. 20110927
Bridge 208 over UT to Mills Branch

APPROVAL of 401 WATER QUALITY CERTIFICATION, and NEUSE BUFFER AUTHORIZATION with ADDITIONAL CONDITIONS

Mr. Jay Johnson
North Carolina Department of Transportation
P.O. Box 1587
Greenville, NC 27835

Dear Mr. Johnson:

You have our approval, in accordance with the conditions listed below, for the following impacts for the purpose of replacing Bridge Number 208 over an unnamed tributary to Mills Branch with an aluminum arch pipe on SR 1433 (Antioch Rd) in Craven County:

Stream and Buffer Impacts in the Neuse River Basin

Site Number	Buffer Zone1 Fill (sq ft)	Buffer Zone2 Fill (sq ft)	Stream Fill (linear ft)	Stream (Temporary)
1	1865	1205		
2	2020	1690		
3	2935	1150		
4	2385	1530		
Total	9,205	5,575	125	24*
Net Total Impacts	**14,780**		**149**	

* temporary impacts due to de-watering activities

The project shall be constructed in accordance with your application dated received October 19, 2011. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification 3820. This certification corresponds to the Nationwide Permit 14 issued by the Corps of Engineers. This approval is also valid for the Neuse Riparian Buffer Rules (15A NCAC 2B .0233). In addition, you should acquire any other federal, state or local permits before you proceed with your project including (but not limited to) Sediment and Erosion Control, Non-Discharge and Water Supply Watershed regulations. This approval will expire with the accompanying 404 permit.

This approval is valid solely for the purpose and design described in your application (unless modified below). Should your project change, you must notify the DWQ and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If total wetland fills for this project (now or in the future) exceed one acre, or of total impacts to streams (now or in the future) exceed 150 linear feet, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you must adhere to the conditions listed in the attached certification.

1. The issuance of this certification does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e. local, state, and federal) having jurisdiction, including but not limited to applicable buffer rules, stormwater management rules, soil erosion and sedimentation control requirements, etc.

2. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If DWQ determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, DWQ may reevaluate and modify this certification.

3. The Permittee shall ensure that the final design drawings adhere to the certification and to the drawings submitted for approval.

4. Unless otherwise approved in this certification, placement of culverts and other structures in open waters and streams shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and downstream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by NCDWQ. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact NCDWQ for guidance on how to proceed and to determine whether or not a permit modification will be required.

5. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water.

6. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.

7. The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage.

8. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers.

9. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions.

10. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream.

11. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials.

12. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification.

13. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.

14. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification.

15. The outside buffer, wetland or water boundary located within the construction corridor approved by this certification shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification.

16. Native riparian vegetation (ex. list trees and shrubs native to your geographic region) must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.

17. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this certification without appropriate modification. Should waste or borrow sites, or access roads to waste or borrow sites, be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities.

18. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards:
    a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual.*
    b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual.* The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
    c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual.*
    d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.

19. Strict adherence to the most recent version of NCDOT's Best Management Practices For Bridge Demolition and Removal approved by the US Army Corps of Engineers is a condition of the 401 Water Quality Certification.

20. Riprap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures should be properly designed, sized and installed.

21. New roadside ditches must be in compliance with the nitrogen control and diffuse flow requirements outlined in 15A NCAC 2B .0233.

22. Pursuant to NCAC15A 2B .0233(6), sediment and erosion control devices shall not be placed in Zone 1 of any Neuse Buffer without prior approval by the NCDWQ. At this time, the NCDWQ has approved no sediment and erosion control devices in Zone 1, outside of the approved project impacts, anywhere on this project. Moreover, sediment and erosion control devices shall be allowed in Zone 2 of the buffers provided that Zone 1 is not compromised and that discharge is released as diffuse flow.

23. All riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated. Maintained buffers shall be permanently revegetated with non-woody species by the end of the growing season following completion of construction. For the purpose of this condition, maintained buffer areas are defined as areas within the transportation corridor that will be subject to regular DOT maintenance activities including mowing. The area with non-maintained buffers shall be permanently revegetated, with native woody species before the next growing season following completion of construction.

24. All stormwater runoff shall be directed as sheetflow through stream buffers at nonerosive velocities, unless otherwise approved by this certification.

25. The Permittee shall report any violations of this certification to the Division of Water Quality within 24 hours of discovery.

26. Upon completion of the project (including any impacts at associated borrow or waste site), the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify DWQ when all work included in the 401 Certification has been completed.

27. A copy of this Water Quality Certification shall be maintained on site at the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager.

If you do not accept any of the conditions of this certification, you may ask for an adjudicatory hearing. You must act within 60 days of the date that you receive this letter. To ask for a hearing, send a written petition that conforms to Chapter 150B of the North Carolina General Statutes to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699. This certification and its conditions are final and binding unless you ask for a hearing. This letter completes the review of the Division of Water Quality under Section 401 of the Clean Water Act. If you have any questions, please contact Garcy Ward at (252) 948-3922.

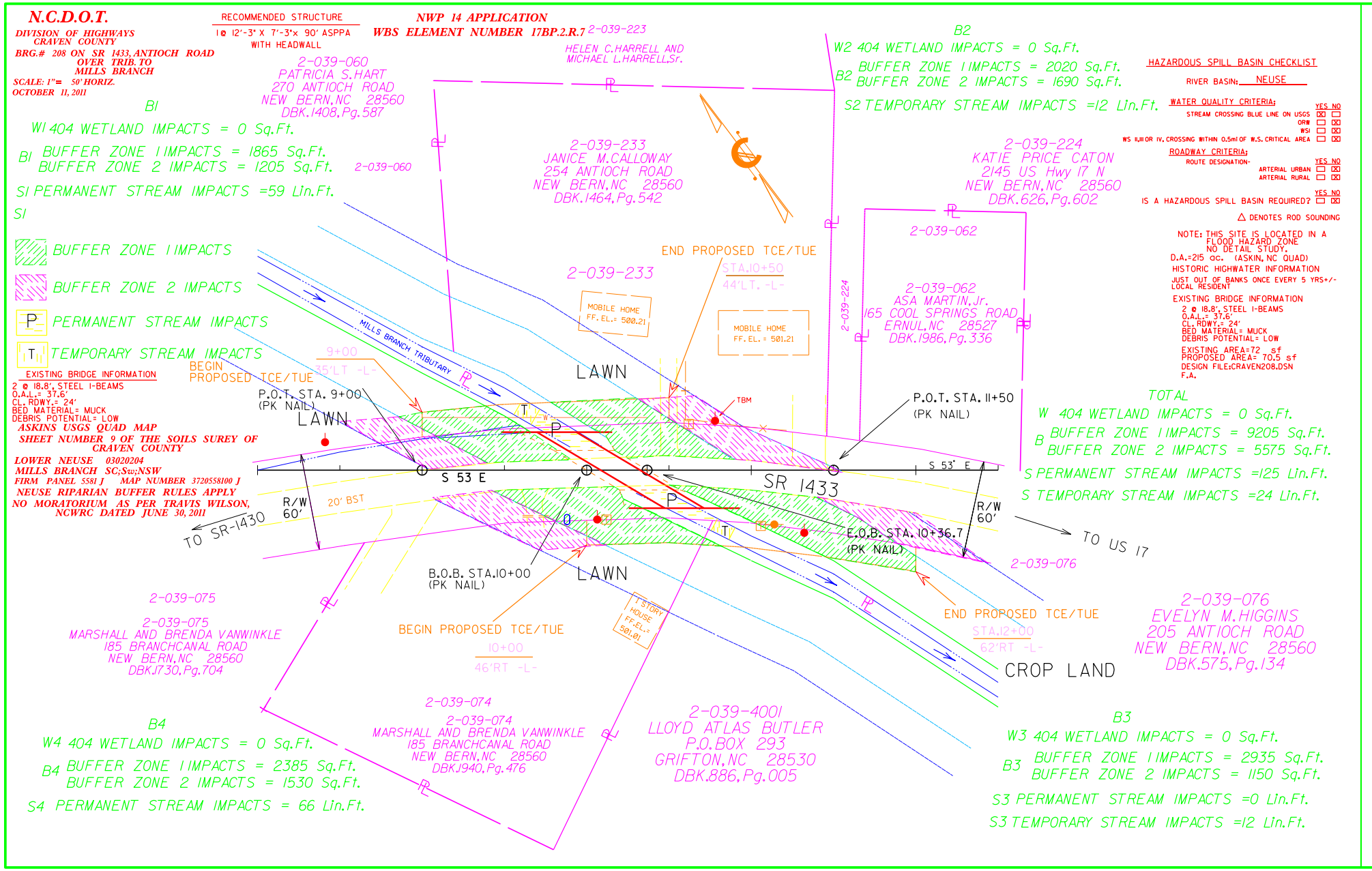
Sincerely,

Garcy Ward

for Coleen Sullins

Attachments (General Certification and Certificate of Completion form)

cc: Tom Steffens, US Army Corps of Engineers, Washington Field Office
Sonia Carrillo, DWQ, 401/Wetlands Unit, Raleigh NC
File Copy


N.C.D.O.T.
DIVISION OF HIGHWAYS
CRAVEN COUNTY
BRG.# 208 ON SR 1433, ANTIOCH ROAD
OVER TRIB. TO
MILLS BRANCH
SCALE: 1"= 50' HORIZ.
OCTOBER 11, 2011
RECOMMENDED STRUCTURE
1 @ 12'-3" X 7'-3"x 90' ASPPA
WITH HEADWALL
NWP 14 APPLICATION
WBS ELEMENT NUMBER 17BP.2.R.7
B1
W1 404 WETLAND IMPACTS = 0 Sq.Ft.
B1 BUFFER ZONE 1 IMPACTS = 1865 Sq.Ft.
BUFFER ZONE 2 IMPACTS = 1205 Sq.Ft.
S1 PERMANENT STREAM IMPACTS =59 Lin.Ft.
S1
BUFFER ZONE 1 IMPACTS
BUFFER ZONE 2 IMPACTS
P PERMANENT STREAM IMPACTS
T TEMPORARY STREAM IMPACTS
EXISTING BRIDGE INFORMATION
2 @ 18.8', STEEL I-BEAMS
O.A.L.= 37.6'
CL. RDWY.= 24'
BED MATERIAL= MUCK
DEBRIS POTENTIAL= LOW
ASKINS USGS QUAD MAP
SHEET NUMBER 9 OF THE SOILS SUREY OF
CRAVEN COUNTY
LOWER NEUSE 03020204
MILLS BRANCH SC;Sw;NSW
FIRM PANEL 5581 J MAP NUMBER 3720558100 J
NEUSE RIPARIAN BUFFER RULES APPLY
NO MORATORIUM AS PER TRAVIS WILSON,
NCWRC DATED JUNE 30, 2011
2-039-060
PATRICIA S.HART
270 ANTIOCH ROAD
NEW BERN,NC 28560
DBK.1408,Pg.587
2-039-223
HELEN C.HARRELL AND
MICHAEL L.HARRELL,Sr.
2-039-233
JANICE M.CALLOWAY
254 ANTIOCH ROAD
NEW BERN,NC 28560
DBK.1464,Pg.542
2-039-060
2-039-233
MOBILE HOME
FF. EL.= 500.21
MOBILE HOME
FF. EL.= 501.21
2-039-062
2-039-062
ASA MARTIN,Jr.
165 COOL SPRINGS ROAD
ERNUL,NC 28527
DBK.1986,Pg.336
2-039-224
2-039-224
KATIE PRICE CATON
2145 US Hwy 17 N
NEW BERN,NC 28560
DBK.626,Pg.602
B2
W2 404 WETLAND IMPACTS = 0 Sq.Ft.
B2 BUFFER ZONE 1 IMPACTS = 2020 Sq.Ft.
B2 BUFFER ZONE 2 IMPACTS = 1690 Sq.Ft.
S2 TEMPORARY STREAM IMPACTS =12 Lin.Ft.
HAZARDOUS SPILL BASIN CHECKLIST
RIVER BASIN: NEUSE
WATER QUALITY CRITERIA;
STREAM CROSSING BLUE LINE ON USGS
ORW
WSI
WS II,III OR IV, CROSSING WITHIN 0.5mi OF W.S. CRITICAL AREA
ROADWAY CRITERIA;
ROUTE DESIGNATION-
ARTERIAL URBAN
ARTERIAL RURAL
IS A HAZARDOUS SPILL BASIN REQUIRED?
YES NO
△ DENOTES ROD SOUNDING
NOTE: THIS SITE IS LOCATED IN A
FLOOD HAZARD ZONE
NO DETAIL STUDY.
D.A.=215 ac. (ASKIN, NC QUAD)
HISTORIC HIGHWATER INFORMATION
JUST OUT OF BANKS ONCE EVERY 5 YRS+/-
LOCAL RESIDENT
EXISTING BRIDGE INFORMATION
2 @ 18.8', STEEL I-BEAMS
O.A.L.= 37.6'
CL. RDWY.= 24'
BED MATERIAL= MUCK
DEBRIS POTENTIAL= LOW
EXISTING AREA=72 sf
PROPOSED AREA= 70.5 sf
DESIGN FILE:CRAVEN208.DSN
F.A.
TOTAL
W 404 WETLAND IMPACTS = 0 Sq.Ft.
B BUFFER ZONE 1 IMPACTS = 9205 Sq.Ft.
BUFFER ZONE 2 IMPACTS = 5575 Sq.Ft.
S PERMANENT STREAM IMPACTS =125 Lin.Ft.
S TEMPORARY STREAM IMPACTS =24 Lin.Ft.
END PROPOSED TCE/TUE
STA.10+50
44'LT. -L-
BEGIN
PROPOSED TCE/TUE
9+00
35'LT -L-
MILLS BRANCH TRIBUTARY
LAWN
LAWN
LAWN
P.O.T. STA. 9+00
(PK NAIL)
P.O.T. STA. 11+50
(PK NAIL)
TBM
S 53 E
S 53' E
SR 1433
R/W
60'
20' BST
R/W
60'
TO SR-1430
TO US 17
B.O.B. STA.10+00
(PK NAIL)
E.O.B. STA. 10+36.7
(PK NAIL)
BEGIN PROPOSED TCE/TUE
10+00
46'RT -L-
END PROPOSED TCE/TUE
STA.12+00
62'RT -L-
1 STORY
HOUSE
FF.EL.=
501.01
CROP LAND
2-039-076
2-039-076
EVELYN M.HIGGINS
205 ANTIOCH ROAD
NEW BERN,NC 28560
DBK.575,Pg.134
2-039-075
2-039-075
MARSHALL AND BRENDA VANWINKLE
185 BRANCHCANAL ROAD
NEW BERN,NC 28560
DBK.1730,Pg.704
2-039-074
2-039-074
MARSHALL AND BRENDA VANWINKLE
185 BRANCHCANAL ROAD
NEW BERN,NC 28560
DBK.1940,Pg.476
2-039-4001
LLOYD ATLAS BUTLER
P.O.BOX 293
GRIFTON,NC 28530
DBK.886,Pg.005
B4
W4 404 WETLAND IMPACTS = 0 Sq.Ft.
B4 BUFFER ZONE 1 IMPACTS = 2385 Sq.Ft.
BUFFER ZONE 2 IMPACTS = 1530 Sq.Ft.
S4 PERMANENT STREAM IMPACTS = 66 Lin.Ft.
B3
W3 404 WETLAND IMPACTS = 0 Sq.Ft.
B3 BUFFER ZONE 1 IMPACTS = 2935 Sq.Ft.
BUFFER ZONE 2 IMPACTS = 1150 Sq.Ft.
S3 PERMANENT STREAM IMPACTS =0 Lin.Ft.
S3 TEMPORARY STREAM IMPACTS =12 Lin.Ft.